

Notice of Allowability	Application No.	Applicant(s)	
	10/534,372	SCHNEIDER ET AL.	
	Examiner	Art Unit	
	Ronald Baum	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/6/2007.
2. ☒ The allowed claim(s) is/are 1 and 9-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material
NASSER MOAZZAMI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100 | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
|---|--|

[Signature]
8/15/07

DETAILED ACTION

Examiner's Statement of Reasons for Allowance

1. Claims 1, 9-12 are allowed over prior art.
2. This action is in reply to applicant's correspondence of 06 August 2007.
3. The following is an examiner's statement of reasons for the indication of allowable claimed subject matter.
4. As per claim 1 generally, prior art of record, Fruehling et al, U.S. Patent 6,625,688 B1, and Chetty, U.S. Patent Appl. Publication US 2002/0052193 A1, fails to teach alone, or in combination, other than via hindsight, at the time of the invention, the features as discussed and remarked upon in the response of 06 August 2007 to office action of 4/17/2007.

Specifically, (as per claim 1 for example) prior art dealing with various configurations of embedded memory (i.e., RAM, ROM, PROM, etc.) with associated microcontrollers utilized to assure memory integrity in various environments (i.e., embedded controllers used in the automotive vehicle and smartcard applications environment), is generally known to exist per se, (security aspects in the automotive control environment insofar as verification of manipulation of memory might effect safety, etc., i.e., Ellims, M. et al, 'Is Security Necessary for Safety?', SCAR '07, Berlin, 14-15 Nov. 2007, entire document, http://www.pitechnology.com/uploads/documents/security_and_safety.pdf). However, nowhere in the prior art is found collectively the *italicized* claim elements (i.e., the *specific relative configuration of the verification, service and control software/firmware as embodiments in the actual read-only and rewritable memory*, and more specifically, as the *write-once area of said rewritable memory is involved primarily for one time storage of the*

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verification program prior to verification (and subsequent consequential reset triggering) as called from the service and control software/firmware (versus the use of various *rewritable, read only, etc., memory* configurations of a microcontroller to *embody the verification program*, that are not *write-once areas of rewritable memory specifically in a control unit in a motor vehicle* having a processor core, per se)), at the time of the invention; serving to patently distinguish the invention from said prior art;

“1. A method for controlling a microcontroller in a control unit in a motor vehicle having a processor core containing at least one read-only memory area, and *at least one rewritable memory area*, at least one control program that is intended to be processed by the processor core being stored in the rewritable memory area, the method comprising:

storing a verification program in

a write-once memory area of the rewritable memory area;

storing a service program in

the read-only memory area;

calling the service program by

the control program

at regular intervals;

calling the verification program by

the service program;

resetting a counter by

the service program when called by

the control program;
verifying at least part of the rewritable memory area by
the verification program;
triggering a reset one of
by the verification program in the event of
manipulation of the verified memory area and
by the counter in the event of
counter overflow.”.

5. Dependent claims 9-12 are allowable by virtue of dependency.


Conclusion

6. Any inquiry concerning this communication or earlier communications from examiner should be directed to Ronald Baum, whose telephone number is (571) 272-3861, and whose unofficial Fax number is (571) 273-3861 and unofficial email is Ronald.baum@uspto.gov. The examiner can normally be reached Monday through Thursday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami, can be reached at (571) 272-4195. The Fax number for the organization where this application is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. For more information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NASSER MOAZZAMI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100


8,15,07

Ronald Baum

Patent Examiner

